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IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1-7, 10-12, and 15 in accordance with the following:

1. (CURRENTLY AMENDED) A computer-aided manufacturing (CAM) system, comprising:
an a numerical control (NC) apparatus for machining a work, which is an object before machining, according to NC data;
a cutting margin model generator that obtains generating means for obtaining a computer-aided design (CAD) model that is solid model data of a metal mold to be made and a measured work geometric model that is geometric model data of said work, which is obtained by measuring said work to be machined, and generating-generates a cutting margin model that is a difference between said measured work geometric model and said CAD model; and
an NC data generating means for generating generator that generates NC data based on the generated cutting margin model.
2. (CURRENTLY AMENDED) The CAM system as set forth in claim 1, wherein said NC data generating means generator generates NC data to machine said work by a predetermined cutting depth at a portion in which said cutting margin exists, and NC data to cause a tool to move without machining at a portion in which said any cutting margin does not exist.
3. (CURRENTLY AMENDED) The CAM system as set forth in claim 1, further comprising:
a unit that measures means for measuring a tool form in a state in which said tool is installed to said NC apparatus, and generates generating a tool model, and
wherein said NC data generating means generator generates said NC data based on both of said cutting margin model and said tool model.
4. (CURRENTLY AMENDED) The CAM system as set forth in claim 1, further comprising:

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a unit that outputs ~~means for outputting~~ an instruction so as to move a tool in either of a tool axis direction and a Z-axis direction, to said NC apparatus, according to a tool load state informed from said NC apparatus.

5. (CURRENTLY AMENDED) The CAM system as set forth in claim 1, further comprising:

a storing unit that stores ~~storing means for storing~~ data informed from said NC apparatus as monitoring data; and

a unit that displays ~~means for displaying~~ said measured work geometric model, which is colored based on load data in said monitoring data stored by said storing means.

6. (CURRENTLY AMENDED) A computer-aided manufacturing (CAM) program embodied on a medium for causing a computer connected to ~~an~~ a numerical control (NC) apparatus for machining a work according to NC data, said program comprising:

obtaining a computer-aided design (CAD) model that is solid model data of a metal mold to be made and a measured work geometric model that is geometric model data of said work, which is obtained by measuring said work to be machined;

generating a cutting margin model that is a difference between said measured work geometric model and said CAD model; and

generating NC data based on the generated cutting margin model.

7. (CURRENTLY AMENDED) The CAM program as set forth in claim 6, wherein said generating NC data comprises generating NC data to machine said work by a predetermined cutting depth at a portion in which said cutting margin exists; and generating NC data to cause a tool to move without machining at a portion in which said any cutting margin does not exist.

8. (ORIGINAL) The CAM program as set forth in claim 6, further comprising: measuring a tool form in a state in which said tool is installed to said NC apparatus, and generating a tool model, and

wherein said generating NC data comprises generating said NC data based on both of said cutting margin model and said tool model.

9. (ORIGINAL) The CAM program as set forth in claim 6, further comprising:

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outputting an instruction so as to move a tool in either of a tool axis direction and a Z-axis direction, to said NC apparatus, according to a tool load state informed from said NC apparatus.

10. (CURRENTLY AMENDED) The CAM program as set forth in claim 6, further comprising:

storing data informed from said NC apparatus as monitoring data; and
displaying said measured work geometric model, which is colored based on load data in the stored monitoring data.

11. (CURRENTLY AMENDED) A method for controlling a computer-aided manufacturing (CAM) system, comprising:

obtaining a computer-aided design (CAD) model that is solid model data of a metal mold to be made and a measured work geometric model that is geometric model data of a work, which is obtained by measuring said work to be machined;

generating a cutting margin model that is a difference between said measured work geometric model and said CAD model; and

generating numerical control (NC) data based on the generated cutting margin model.

12. (CURRENTLY AMENDED) The method as set forth in claim 11, wherein said generating NC data comprises generating NC data to machine said work by a predetermined cutting depth at a portion in which said cutting margin exists; and

generating NC data to cause a tool to move without machining at a portion in which said any cutting margin does not exist.

13. (ORIGINAL) The method as set forth in claim 11, further comprising:

measuring a tool form in a state in which said tool is installed to an NC apparatus, and
generating a tool model, and

wherein said generating NC data comprises generating said NC data based on both of said cutting margin model and said tool model.

14. (ORIGINAL) The method as set forth in claim 11, further comprising:

outputting an instruction so as to move a tool in either of a tool axis direction and a Z-axis direction, to an NC apparatus, according to a tool load state informed from said NC apparatus.

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15. (CURRENTLY AMENDED) The method as set forth in claim 11, further comprising:
- storing data informed from an NC apparatus as monitoring data; and
 - displaying said measured work geometric model, which is colored based on load data in the stored monitoring data.